

Remarks

Claims 43-72 were under consideration in the application. Claims 45-69 are amended. After amendment, claims 43-72 remain pending in the application. Please reconsider the objections and rejections in light of the changes to the application and the remarks which follow.

Objection was made to claims 45-69 for improperly referring to claim numbers that have been cancelled. This objection is correct and the undersigned attorney apologizes for any inconvenience (by mistake, such dependencies were not previously corrected). The dependencies of claims 45-69 are rectified in the above amendments. Multiple dependent claim fees were previously paid in this application (in the March 11, 2008 submission). Please consider these claims on the merits.

Claims 43, 44 and 70-72 were rejected under section 112 for being indefinite. The term "rigid" was considered a relative term. Please reconsider this rejection. Applicant consistently refers in the application to a "rigid" conduit (see, e.g., pg. 9, lines 4-31; pg. 14, lines 20-29; pg. 18, lines 1-4; and Figs. 1-3, 46-52, 72-74 and 77), such term having meaning to those skilled in the art. One of ordinary skill in the art would appreciate that within the context of the application, and in the context of coker vessels and devices used in association with petrochemical plant processing equipment, the "rigid" conduit would be stiffer than coiled tubing and sufficiently rigorous to support the flexible conduit (coiled tubing) and any related structures, and it is noteworthy that the term used is "rigid" not "modulus of rigidity". Applicant is entitled to claim a scope of meaning according to that which Applicant intends to cover. Breadth of a claim is not to be equated with indefiniteness. See MPEP 2173.04 citing *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Additionally, the term "rigid" is not akin to the types of terms known to be indefinite relative terms such as those addressed at MPEP 2173.05(b) (MPEP section for relative terminology). It is believed that the term "rigid" is definite as used in the claims, and is consistent with its use in the specification and drawings.

Claims 43, 44 and 70 were rejected under section 102(b) as being anticipated by Lumbroso, et al. (US Patent No. 4,828,651). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. Lumbroso, et al., among other things, do not expressly or inherently describe an elongated flexible conduit insertable through the rigid conduit into the vessel... said elongated flexible conduit sufficiently long to extend beyond an innermost end of said rigid conduit... Therefore, it is believed that claims 43, 44 and 70 are novel.

The Applicants' Claims 43, 44 and 70 are directed to an apparatus for cleaning a vessel, the apparatus comprising:

- a) *an elongated rigid conduit insertable into the vessel such that the rigid conduit extends therein; and*
- b) *an elongated flexible conduit insertable through the rigid conduit into the vessel, for conducting pressurized liquid into the vessel to clean the vessel, said elongated flexible conduit sufficiently long to extend beyond an innermost end of said rigid conduit when said elongated flexible conduit is inserted into said vessel.*

Accordingly, the Applicants' claimed apparatus requires the use of both a rigid conduit and a flexible conduit for insertion through the rigid conduit. The rigid conduit is provided, at least in part, to support the flexible conduit so that the flexible conduit may be extended into the vessel a sufficient distance to permit cleaning of the desired components therein, such as the cyclone snouts, by the flexible conduit. Pressurized liquid is then conducted through the flexible conduit into the vessel to perform the cleaning operation.

Referring to Lumbroso et al, Lumbroso et al. describe the removal

of coke from a coking reactor 2 by lowering a flexible tube 10 into the reactor, wherein the lowermost end of the flexible tube 10 includes a water ejection device or turbine 11. Pressurized water is directed through the flexible tube 10 for ejection from the turbine 11 in order to clean the reactor. As shown in Figure 1 of Lumbroso et al., the flexible tube 10 is wound about a storage drum 5 and lowered into the reactor 2 by one or more guide pulleys 13.

More particularly, in operation, the upper and lower ends of the reactor 2 are opened and the turbine 11 is lowered, via a guide pulley 13, *by simply unwinding the flexible tube 10 from the storage drum 5. Thus, the flexible tube 10 is simply lowered through an open upper end of the reactor 2.* Further, the turbine 11 is lowered into the reactor 2 *by the operation of gravity* given the described weight of the turbine 11. If the turbine 11 is insufficiently heavy, a relatively heavy additional mass 12 (shown attached to the end of the tube 10) enables the weight borne by the tube to be increased. The mass 12 is simply a weight. Finally, the guide pulley 13 simply ensures that the flexible tube 10 is kept in line with the axis of the reactor 2 and does not specifically aid in the insertion of the flexible tube 10. (Column 1, lines 47 - 54; Column 1, line 65 - Column 2, line 8; Column 3, lines 50 - 68; Column 4, lines 8 - 20 of Lumbroso et al.).

Thus, in summary, it is respectfully submitted that Lumbroso et al. do not anticipate, teach, disclose or suggest in any manner whatsoever the combined use of a rigid conduit and a flexible conduit, as claimed, for cleaning a vessel.

Claims 71 and 72 were rejected under section 103(a) over Lumbroso et al. as combined with Clapp, et al. (US Patent No. 4,799,554). Please reconsider these rejections in light of the remarks which follow. As outlined above Lumbroso et al. do not describe the apparatus as claimed in claims

71 and 72 (such claims having common language to that as discussed above for Claims 43, 44 and 70), wherein the apparatus is comprised of both an elongated rigid conduit insertable into the vessel and an elongated flexible conduit insertable through the rigid conduit for conducting pressurized liquid into the vessel... *said elongated flexible conduit sufficiently long to extend beyond an innermost end of said rigid conduit when said elongated flexible conduit is inserted into said vessel.* Neither Clapp et al. or Lumbroso et al teach or suggest the combination of a flexible conduit insertable through the rigid conduit the *elongated flexible conduit sufficiently long to extend beyond an innermost end of said rigid conduit when said elongated flexible conduit is inserted into said vessel.* All limitations of a claim must be considered especially when missing from the prior art. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, it is believed that the motivation to modify is lacking as the intended function of Applicants' claims would be destroyed were one to attempt to combine Clapp et al. and Lumbroso et al. Neither teaches or suggests the rigid conduit as supporting the flexible conduit to prevent fluid from flowing through a gap. The Supreme Court KSR decision mandated "predictability" as a standard under Section 103 for determining patentability. KSR International Co. v. Teleflex, Inc., 82 USPQ2d 1385 (2007). In applying this standard it is believed the cited art evidences a lack of predictability for the claimed apparatus due to the distinctions in structure and in function as discussed above.

Please reconsider and reexamine the application, and telephone the undersigned attorney if it could help to expedite the resolution of this application.

Respectfully Submitted,



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